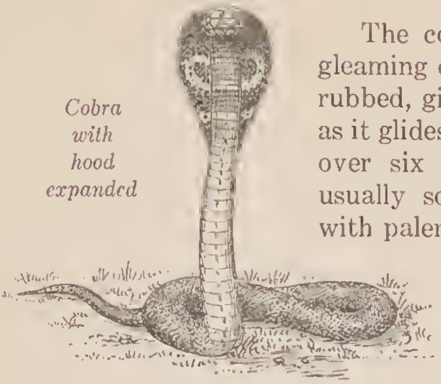
FIELD MUSEUM
STORIES

The Cobra

Series XL, No. 1
March 6, 1943

Looseleaf No. 72

THE COBRA



Cobra with hood expanded

The cobra, slender and stream-lined, gleaming dully as though newly oiled and rubbed, gives little sign of its possibilities as it glides along. Its length is sometimes over six feet; its colors are modest—usually some shade of brown or black with paler markings upon the throat or in bands across the body. The flattened head, equipped with two beady, round-pupiled eyes and a black-tipped, out-darting tongue, bulges slightly on both sides before tapering into the neck. Under those inconspicuous swellings lies the poison which, though mainly used for paralyzing other animals that they may more easily be swallowed, is so successful as a means of defense that the cobra is one of the most feared of all snakes.

When intent on a frog, rat, small bird, or smaller snake, the cobra by a quick drive of its head fastens its teeth in the other animal and sometimes chews rapidly up and down before releasing its hold. Meanwhile the muscles surrounding the poison glands press out the venom, which runs, as if down a pipe, through an immovable hollow tooth on either side of the upper jaw and into the flesh of the victim. Within a few moments the venom has started its work of destroying the nervous system and presently the animal lies helpless and unable to breathe, dying and ready to be eaten.

There is usually far more action if the cobra is suddenly startled or attacked, for then the snake raises as much as a third of its body erect from the ground. As it wavers slightly back and forth, hissing the while, the ribs for a handsbreadth behind the head lift up and out until the skin over them is stretched wide and taut into a bellows-shaped "hood." It is then that in some cobras there spreads into view the pale, spectacled, ring-like, or half-moon pattern on the hind side of the hood. If an arm or leg of the enemy comes within striking distance, the cobra head with jaws apart stabs out and down, probably leaving in its mark venom enough to kill hundreds of rats or several men. Some cobras are able to inject the poison directly or can squirt it from their fangs for a distance of several feet. Although the cobra rarely goes out of its way to start a fight, it will usually stand its ground when cornered; when the danger has passed, it slowly lowers its body, collapses its hood, and slides away.

A snake-charmer of countries abroad earns part of his living by making use of the cobra habit of rising and showing the hood. He encloses the snake, caught recently enough to be easily excited, within a darkened basket, and after seating himself comfortably upon the ground in front of the basket, begins to play upon a flute. Presently he knocks off the basket lid, and upward into the light flows the cobra, its hood expanded at the strangeness and movements about it. Then the snake-charmer blows increasingly upon his flute and the cobra swings into the rhythm of the notes by swaying from side to side. Actually, however, the snake is following with its eye and body the endless side and back movements of the flutist, rather than the beat of the music, for the cobra, like other snakes, is deaf; it does not hear music with its ears but only "feels" sounds that cause the ground to vibrate.

All cobras are not of the same kind, nor do more than two or three kinds live in the same place, for they are natives of many lands—the East Indies, warmer parts of southern Asia, and most of Africa. Their homes may be in jungle or open country, but just as often are they seen dozing in the flower border of a city garden or coiled amongst the stones of a crumbling house or wall where they have come in search of rats or chicken eggs.

In a patch of undergrowth the female lays her twenty or more cream-colored, tough-shelled eggs. She and the male may stay nearby to guard the nest, but when the young hatch out, as able as their elders to bite, the parents leave and the hatchlings are obliged to care for themselves during the twelve or more years that they may live.

ELIZABETH BEST
Raymond Foundation

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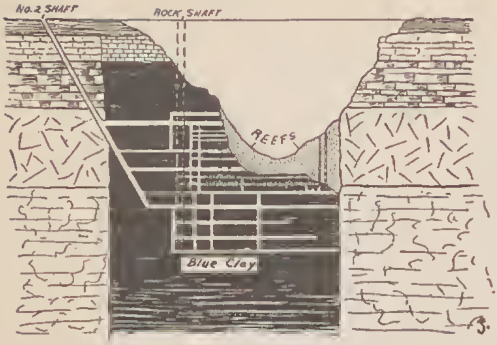
FIELD MUSEUM STORIES

South African Diamonds

Series XL, No. 2
March 13, 1943

Looseleaf No. 73

SOUTH AFRICAN DIAMONDS



A typical diamond mine in South Africa

Diamonds have enlisted to help us win the war. In peace times diamonds are valued for their beauty but today it is the tough variety, known as carbonado, that is aiding us to defeat the Axis.

No modern armament factory can function without diamonds. Only with lathe tools set with diamonds can the hard metal alloys used in making armaments be cut fast enough to supply present military demands. Pistons, connecting rods and bearings in engines for trucks, tanks, aircraft and ships are cut and finished with diamonds. Lenses for rangefinders, bomb sights, telescopes and aerial cameras are polished with diamond dust.

At other times drills set with diamond points reach far into the earth for petroleum; they cut passes over mountains and tunnels under rivers for railroads and highways.

For years large diamonds were rare but recently so many diamonds have been discovered in West and South Africa that they have become the most abundant precious stone.

In India, the first country renowned for its diamonds, the lapidaries discovered that the stones could be polished and ground in their own powder and as the beauty of cut diamonds became apparent they increased in value.

Late in the eighteenth century diamonds were discovered in Brazil, and today this is the chief source of the opaque sort of diamond so useful today—the carbonado. Carbonados for drills command as high prices as gem material of the same weight.

The first South African diamond was picked up by a child; no one realized its significance until two years later, when a shepherd boy picked up the gem now known as the Star of South Africa. This stone came from the gravel banks of the Vaal River. Haphazard delving by farmers was followed in 1870 by a "diamond rush"; between four and five thousand miners prospected the river shores. During the next year some rich deposits were found far from the river in arid regions, and one of them, the Kimberly mine, has become world-renowned. In 1905 deposits were found at the Premier mine in Transvaal about three hundred miles east of Kimberly. Today all these deposits, known as dry diggings, have been temporarily closed in favor of the river diggings, for the latter are much cheaper to operate.

Dry diggings occurred in concave dips. Under the surface soil was a layer of yellow clay about fifty feet thick in which the diamonds were embedded; below this was a hard "blue ground," also containing diamonds. The overlaying yellow earth was weathered blue ground.

Each prospector was allowed a claim about thirty feet square and dug up the rock, carrying it out over roadways which had been left between the claims. As digging became deeper these roadways fell into the pits; so a system of cables was installed to haul the buckets of blue earth to the sorting yards above. Now, however, earth slides or "reefs" from the sides of the pit began to cover the diggings and sometimes the miner. As the holes grew deeper it was realized that open pit mining could not continue and the mines seemed destined to close. Underground mining was tried but this was expensive; only when various claims were consolidated into a company was it possible to sink shafts.

Today the dry diggings are apparently deserted but under ground the work of removing the blue earth continues. Work progresses in several tunnels and as earth is removed the roof falls in, closing the tunnel. In this way the open pit above continues to sink. The blue ground is loaded into trucks and lifted to distributing floors above. Here it is spread out in the open air to weather until it crumbles. It takes from three months to a year, depending on the weather, to reduce the blue earth to dust; sometimes it is helped along by being plowed and watered. The pulverized earth is washed and the heavier minerals are retained. Diamonds were hand-picked until it was discovered that they would stick to a greased surface. Now the concentrates are washed down a table of corrugated iron which is smeared with grease, and the diamonds stick to the greased plates.

The origin of diamonds is still undetermined.

Marie B. Pabst
Raymond Foundation

Note: In Hall 36 there is an exhibit of diamond and the related mineral graphite. The gem room contains specimens of precious stones and models of some of the world's famous diamonds.

This page is for your own notes and illustrations

FIELD MUSEUM STORIES

Indians of the Plains

FIELD MUSEUM of NATURAL HISTORY
FOUNDED BY MARSHALL FIELD 1893
CHICAGO

Series XL, No. 3
March 20, 1943
Looseleaf No. 74

Indian woman with travois

When White men first came to the Great Plains area of North America they found Indians living there who were different in many ways from the Indians they had met east of the Mississippi. Most of the Plains Indians did no farming; many of them did not even catch the fish in the rivers along which they lived. They ate wild fruits, berries, and vegetables, which were gathered by the women and children.

The herds of wild buffalo that roamed these vast plains were very important to the Indians because they ate the buffalo meat and used the skins for making clothing, utensils, and tents. To prepare the meat for eating, the Indian women would boil, broil, bake, or roast it. Much of it had to be preserved and for this purpose the women would cut it into strips which were put on frames in the sun to dry. Afterwards these strips were browned over a fire and then pounded into powder. The powder was mixed with melted fat and dried fruits and berries, and then placed in a skin bag. This mixture, which is called "pemmican," was stored until some time in the future when the Indians would eat it. Pemmican is a very nutritious food and has been widely adopted by White trappers and explorers.

Many of the utensils used by the Plains Indians were made of buffalo skins. They also made bags and pouches of skins, and spoons, cups, and small dishes from the horn of the buffalo.

The Plains Indians clothed themselves entirely in skins—many of them buffalo skins. First the hides were scraped. Then they were pounded and rubbed and treated with a mixture of vegetable substances. After the skins were softened they were made into various articles of clothing—leggings, moccasins, shirts, and robes for the men, and leggings, sleeveless dresses, moccasins, and capes for the women.

The homes of these people were skin tents called "tipis." To build a tipi three or four poles were placed in the ground and bent so that the top ends of the poles met and could be tied together. Against these poles were placed many smaller ones arranged in a circle. Over the poles was stretched a cover of buffalo skins which were fastened to the ground with pegs or stones. An opening was left in the top for the escape of smoke, and flaps, which could be opened, served as a door.

During the winter the Plains Indians lived in some protected place and ate pemmican and dried fruits. During the summer, however, the people moved frequently, following the buffalo herds. To see a group of Indians on the march was a spectacular sight. Scouts would ride ahead of the group so that they could warn the people of approaching enemies. The chiefs and old men led the procession while each family would follow with its dogs and household possessions. Sometimes these groups would extend for several miles. The packs of household possessions were carried on the backs of the women, children, and dogs. Often the poles of the tipi would be tied to the dog's back with the ends free to drag along the ground. This proved to be a very useful way of carrying the tipi poles. Later certain people began to put bundles of utensils on the poles as they dragged along the ground and from this came the idea of the *travois* which became so important to the Plains Indians. The word *travois* is a French word pronounced trav′wäh. The *travois* was made by lashing the ends of two poles together to form a ∧ shape. Then an oval netted frame or a rectangular cross-frame was fastened to the poles near their centers. When the Indians were preparing to move they would hitch the pointed end of the *travois* to the harness of a dog and the free ends of the poles would drag along the ground. The bundle of family utensils was placed on the netted or rectangular frame and in this way the dog would transport the pack.

For many years the *travois* was used with dogs only, because the Plains Indians did not have horses. However, when the White man came he brought the horse with him and the Plains Indians made very great use of it. Although they still used the *travois* with the dog they also made larger ones and hitched them to horses.

Virginia Drew
Raymond Foundation

Note: In Hall 5 there are many articles made and used by the Plains Indians, including a *travois*.

This page is for your own notes and illustrations

FIELD MUSEUM STORIES

Dandelions—Born Parachutists

Series XL, No. 4
March 27, 1943
Looseleaf No. 75

DANDELIONS—BORN PARACHUTISTS

A dandelion plant and an enlarged seed

Some day you may be riding on tires made from dandelion rubber! The weed we now pull from our gardens is being regarded with interest by chemists and in some of the eastern states dandelions are being planted on farms; for from dandelions it is possible to produce much-needed rubber, not as good as Hevea rubber, but still rubber that can be made into tires.

Within the dandelion is a milky juice called latex. Latex, the raw material from which rubber is produced, is found in many other plants, including the Brazilian rubber tree, figs and milkweed. Since the main rubber-producing regions of the far east have been taken by the Japanese during the progress of the present war, scientists are experimenting with latex-producing plants that can be raised in the United States. Russians have found a variety of dandelion that is a potential source of rubber and it can be easily grown in our country. The latex is derived from the root, which is larger than that of our familiar dandelion plants, and it is harvested at the end of a growing season. One acre can yield between 150 and 200 pounds of crude rubber.

To those who live in the city one of the earliest signs of spring is the appearance of the dandelions. After the first few sunny days the parkways are dotted with the golden flowers and they continue to bloom throughout the summer. One reason these flowers can open so early is the reserve supply of food the plant has stored in its long, tough roots.

People who consider dandelions a nuisance try to eradicate the plant by cutting away the circlet of leaves, but shortly a new cluster appears, nourished by the food in the root. Sometimes these roots reach as far as four feet into the ground.

In the early spring the flower buds develop and about three days after the buds appear the tall yellow blossom is opened to the sunlight. Dandelion flowers are in dense clusters at the ends of long hollow stems. In the head are multitudes of small five-parted individual flowers, each one of which produces a single seed. Soon insects visit the flowers, gathering nectar and distributing pollen, and in about a month the seeds are mature and ready for their travels. One plant produces about 12,000 seeds a year.

Dandelions used the air for transportation long before the Wright brothers perfected their first airplane. The cluster of seeds looks like a white ball of fluff atop the stem. Each individual seed is topped by a crown of white hairs; it looks like a tiny parachute and each seed can be readily carried by the wind far from the parent plant. On cool rainy days, when conditions are not favorable for "seed flying," the head containing the seeds remains closed, to open again in fair weather.

There are several varieties of dandelion in the United States; two are found in the Chicago region, the common and the smaller red-seeded dandelion.

Man has found many uses for this plant that is considered a weed. Young leaves make good salad greens and pot herbs. The root of a variety growing in Oregon is of commercial value and is used in making a medicine. A wine is made from the flowers and the seeds are gathered for a dye.

The dandelion is an immigrant and its original home is supposed to be Europe. Wherever man has moved the dandelion shortly thereafter has made its appearance. Possibly the seeds are carried along with the seeds of farm crops and so man himself may be responsible for the wide distribution of this plant. It is not particular about its home site and grows well where soil is sterile and arid.

MARIE B. PABST
Raymond Foundation

This page is for your own notes and illustrations

FIELD MUSEUM STORIES

Oil from Venezuela

Series XL, No. 5
April 3, 1943

Looseleaf No. 76

OIL FROM VENEZUELA

As the Andes Mountains of South America reach the northern limits of the continent they branch, one limb spreading to the east and the other continuing north. Between these two highland regions is a broad depression partly filled by the shallow waters of Lake Maracaibo. The swampy lake is 120 miles long and 60 miles wide; its outlet is a sluggish river 34 miles long that flows north into the Caribbean Sea. For years shifting sandbars have blocked the entrance of this river to ocean-going vessels and consequently few visitors came to the lake.

Lake Maracaibo today

The Spaniards who entered the region about 1523 found Indian villages built on piles over the shallow lake and named the country "Little Venice" or Venezuela. Descendants of these peaceful Indian fishermen still live in stilt houses; but today oil derricks, also on stilts, make a metal forest over the primitive pile-houses, for the shallow basin containing Lake Maracaibo also holds petroleum wells that are largely responsible for the conversion of Venezuela into a nation of economic importance.

Until 1918 this portion of Venezuela was comparatively unknown. The largest city on the lake, Maracaibo City, was a sleepy tropical town. Along the shore a few sugar-cane and cacao plantations were established among the coconut groves, and swarms of mosquitoes droned around the lake. No one paid much attention to the sticky black ooze that sometimes covered the water and gummed the fishermen's nets.

Because of the oil seepages along the shore it was common knowledge that oil deposits of some size must exist in the region, and prospecting by North American and British oil companies revealed the presence of limestone and shale layers similar to those which yield such an abundance of petroleum in Mexico. In 1914 four wells were sunk but not until after the first world war were refineries and outside transportation facilities made available for the profitable development of these drillings. Oil was found not only along the shore but in the earth below the surface of the lake, necessitating the building of superstructures out over the water.

The expectations of the prospectors were more than fulfilled as the flow from subsequent drillings proved to be among the most prolific in the known oil fields of the world. Venezuela now ranks third among petroleum-producing nations; only the United States and Russia exceed in the amount of petroleum produced. Maracaibo City itself reflects the change that has come with the oil wells, for today it is a prosperous town with paved streets, convenient transportation facilities and good schools.

The river which joins the lake and the sea is still a problem because of its changing channel, and constant dredging is necessary to keep a passage clear for the shallow-draft oil tankers bound for the northerly islands of Curaçao and Aruba. On these islands—possessions of the Netherlands—are located huge refining and cracking plants. The crude oil from Venezuela is here turned into motor fuel, high-octane gasoline and lubricants, and all the by-products that come from the refining of petroleum. Ocean-going tankers then carry the oil to consumers in England and the United States. Before the present war most of the Venezuelan oil was sold in European markets.

More recently oil fields have been located in other parts of Venezuela. Along the coast of the Caribbean just north and east of the Maracaibo Basin are the rich fields in the state of Falcon. Farther east, in the basin of the Orinoco River, are the latest fields to be opened. Prospecting is now under way in the llanos (grassland) region farther inland with indications that here also Venezuela has rich oil deposits.

MARIE B. PABST
Raymond Foundation

NOTE: The origin of petroleum and the locations of various oil deposits of the world as well as the products derived from petroleum are shown in Hall 37.

This page is for your own notes and illustrations

FIELD MUSEUM STORIES

Totem Poles

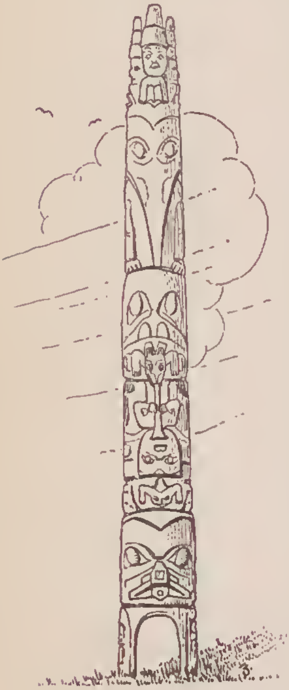
Series XL, No. 6
April 10, 1943

Looseleaf No. 77

TOTEM POLES

Your family name on the mail box at your door shows where you live. In some parts of the world, families have other ways of telling about themselves. One of the strangest methods is by the use of totem poles.

The North American Indians who make use of totem poles live on the northern Pacific coast and on the islands near it. To the east, high cedar-forested mountains rise steeply from the narrow coast, and on the west is the ocean. It is a stormy country. Winds among the trees, and waves make strange and dreadful noises. There are dangerous creatures in forest and sea—bears, wolves, sharks, killer-whales; there are also creatures that seem mysteriously wise—the beaver, which makes wonderful houses in the water, and the raven, a bird like the crow but much larger, which flies about the Indian villages and appears to visit them in friendly fashion. In former times it seemed to the people of this region that the world was full of powerful spirits which they heard in storm noises and saw in trees, rivers, rocks, birds, and animals of sea and land. They believed that the spirits were sometimes dangerous and harmful, as when a man was killed by a fierce bear, or drowned when the waves upset his canoe; and sometimes helpful, as when the salmon swam up rivers so that the Indians could easily catch and eat them.



Haida totem pole from "House-people-always-like-to-go-to."

The Indians thought that each family was related to at least one of these spirits. Families among them are still known by the names of their spirit relatives, called their "totems." Usually the totem is an animal. All persons who have the same totem are considered to be related, and bound to help each other. If a man visits a strange village, he goes at once to the house of a family of his totem, knowing that he will be received as a brother, even if the people have never seen him before.

A man in a strange village has no trouble in finding his own group. In front of each house stands a post or pole, carved and painted with the totems of the people who live there. If a man of the Raven totem has a wife of the Bear totem, the pole before their house may have a raven at the top and a bear at the bottom. Perhaps there may be one or two cubs with the bear, to show that there are children in the family, for in many tribes children belong to their mother's rather than to their father's totem group.

Some poles show only totems, but more have other figures carved in the space between their places at top and bottom. A few of these are simply ornamental, but most refer to some old story of a hero connected with the family or to some important happening of recent times. On one pole the figure of a raven with the moon in its beak suggests the story that the world was in darkness till the friendly and clever raven stole daylight from its hiding place on the other side of the sky, and put the sun, moon, and stars where they are now. People of the Raven totem are naturally proud of this story.

Occasionally figures on totem poles make fun of certain people. For instance, it was an old custom among the Haida tribe that a man who refused to pay his debts might expect to see his own face represented, upside down, among the carvings of the lender's totem pole. Thus the whole village learned that the man was not to be trusted. Naturally it seldom happened that a Haida villager failed to repay what he borrowed.

Besides totem poles in front of the houses, and carved posts that support the roof beams inside, there are carved poles set up after funerals as memorials to the dead, and carved grave posts in cemeteries. Huge figures of the totem animals sacred to important people are often placed near their houses or their graves. All these poles and carvings were originally painted in many colors, but old ones have long since had all the color worn off by wind and rain. Weatherworn and gray, they are still monumental works of art, and give the villages of the totem pole peoples a charm found nowhere else in the world.

JUNE WORK*
Raymond Foundation

NOTE: In Hall 10 are many carvings made by the totem pole Indians. Look carefully at the small model of a Kwakiutl house, which shows the carved posts inside as well as the totem pole in front, the large, old, Haida carving of a frog totem, and the many carvings in the adjoining passageway. The totem pole illustrated is also in Hall 10.

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* This story is reprinted. It appeared originally on November 8, 1930.

This page is for your own notes and illustrations

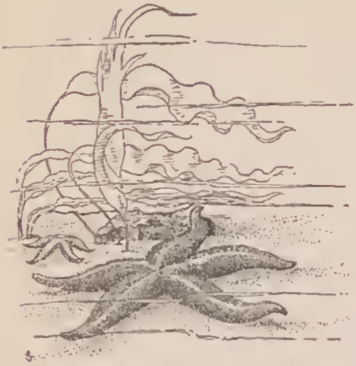
FIELD MUSEUM STORIES

The Starfish, Native of the Sea

Series XL, No. 7
April 17, 1943

Looseleaf No. 78

THE STARFISH, NATIVE OF THE SEA



Starfish on floor of ocean

The dead and dried starfish hanging stiffly next others of its kind within a glass-walled museum case shows only the end chapter of its changeful watery life.

The starfish begins existence as a very small egg either dropped into the sea-water by the female, or held upon her body until hatching time. Out of the egg comes a young one, or larva, so small that it can be seen only with a microscope, and as clear as the water itself. Its body is drawn out into several transparent waving arms and the whole little animal is covered with hair-like cilia which, acting as oars, row in unison to carry it about. Floating and swimming at the surface of the ocean, it eats even smaller beings and grows until it can be seen by the naked eye. Then begin great changes; the arms disappear into the rest of the body, and the star begins to develop. When it is complete, though still no larger than a good-sized pin-head, the starfish, too heavy now to be buoyed up by the water, sinks slowly downward to start life on the sea-bottom. After a year there of hunting, feeding, and growing, it may have three-inch-long arms, and perhaps even longer ones as time goes on.

The skeleton is fashioned in star shape, but in some kinds of starfish it is a star of fifteen to forty points rather than but five. A limy network of bars or plates, it is so joined together that the arms or rays can twist and bend as easily as the petals of a flower blown by the wind. Over most of this scaffolding lies a thin layer of muscle and skin of perhaps red, or blue, or yellow color, while between the bars stand little hollow fingers of skin, the "gills," through which oxygen can pass to all parts of the body. Scattered over and attached to the skeleton are limy spines of different lengths and often clustered about these are smaller spines armed with snapping jaws. This shaggy, bristling cover many times prevents the starfish from serving as a meal for other animals.

The starfish not only lies in sea-water but is filled with it as well. The sea flows in through a small sieve-like oval plate that lies between a pair of arms on the top surface of the animal. From this entry-way it runs down a short canal into a circle of tubing around the hub of the star, and then into the tubes that travel like spokes of a wheel out to the arms. Attached to these arm tubes are hundreds of soft-skinned, so-called tube feet, which are much like very small medicine droppers filled with water and closed at both ends. By squeezing the bulb of the tube foot, the foot itself is stretched out by the water forced into it; when the bulb is relaxed, the water rushes back to it, the foot shortens and may hold on by suction to whatever it is touching.

These little feet, which dangle through the slit on the under surface of each arm, are of use in many ways to their owner. The starfish can glide easily by means of them over the bumps and gullies of the ocean floor. The feet of several arms stretch their fullest in the direction toward which the animal is moving, then as the feet touch something hard, the body is swung forward over them; the feet next shorten and pivot forward once more for a new step. In getting food, even perhaps in searching it out, the tube feet also have their place, for when a sea-worm, a small crab, or another starfish is touched, the tube feet hold and pass it to the mouth, a small hole in the center of the under side of the body. When the prospective meal is protected, as in the oyster, by a heavy closed shell, the common starfish of the European and American coasts balances itself on two or three arms and fastens the tube feet of the others against the two halves of the oyster shell. Slowly but surely it pulls upon them until the oyster lies helplessly open. Then out of the starfish mouth billows the stomach, turned inside out that it may digest the oyster on the half shell. Thousands of dollars' worth of oysters are disposed of in this way each year by hungry starfish.

The starfish themselves have enemies, mainly in the form of larger fishes; but since they can live in warm, cold, shallow, or deep ocean waters, and are able to regrow a whole body if even as little as one arm and a fifth of the central hub is left, they have been able to survive their foes and are today one of the most common of all sea animals.

Elizabeth Best
Raymond Foundation

Note: Several kinds of starfish and their relatives, the sea-cucumbers, sea-urchins, brittle-stars, and sea-lilies, can be found in Hall M.

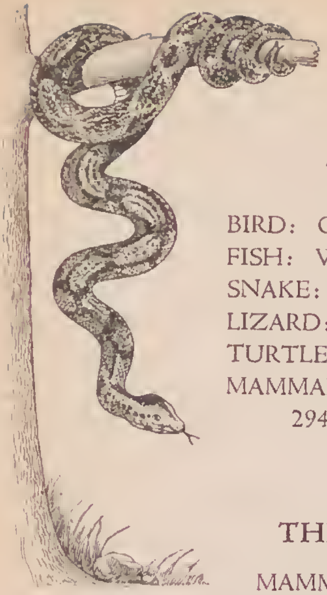
This page is for your own notes and illustrations

FIELD MUSEUM STORIES

Facts and Fables About Animals

Series XL, No. 8
April 24, 1943

Looseleaf No. 79



Giant snake

DO YOU KNOW

THE LARGEST ANIMALS?

BIRD: Ostrich (height 8 ft.)
FISH: Whale shark and basking shark (length 40-50 ft.)
SNAKE: Reticulated python (length 30 ft.)
LIZARD: Dragon lizard of Komodo (length 10 ft.)
TURTLE: Leatherback sea turtle (weight 1,500 lbs.)
MAMMAL: Sulphur-bottom whale (length 95 ft., weight 294,000 lbs.)

THE SMALLEST ANIMALS?

MAMMAL: Pygmy shrew (length 3 inches)
BIRD: Hummingbird (length 2 3-8 inches)
REPTILE: Gecko lizard (length 2 inches)

Shrew

THE GREATEST ANIMAL SPEEDS?

Prongbuck

MAMMALS: Prongbuck antelope runs 60 miles an hour
Cheetah runs 70 miles an hour (for a distance of 100 yds. only)
FISH: Tuna (one of the fastest) swims at a cruising pace of 30 miles an hour
SNAKE: Red racer runs about 3.6 miles an hour
BIRDS: Duck hawk flies at the rate of 180 miles an hour, when hunting
Rhea runs about 40 miles an hour

THE ANIMALS THAT LIVE THE LONGEST?

BIRD: Owl (68 years)
MAN: 105 years
REPTILE: Giant tortoise (225 years)
FISH: European catfish (60 years)
MAMMAL (other than man): Elephant (51 years)
INSECT: Cicada (17 years)

Elephant

Geese

THE GREATEST TRAVELERS?

BIRDS: Arctic tern migrates 11,000 miles one way each year (22,000 miles round trip)

Golden plover makes the longest non-stop flight (about 2,500 miles)

Some of these birds travel high above us; wild geese have been seen travelling about 6 miles up in the air.

Bat

THAT A BAT IS NOT A BIRD AND A WHALE IS NOT A FISH?

A bat has hair instead of feathers and it suckles its young; therefore it is a mammal.

A whale is warm-blooded and it suckles its young; therefore it is a mammal.

THE NUMBERS OF FEATHERS, HAIRS, AND SCALES ON ANIMALS?

SCALES: Garter snake (5,000)
HAIRS: Man (154,300)
Ape (636,400)
Wildcat (4,106,000)

FEATHERS: Mallard duck (11,900)
Common chicken (8,325)
English sparrow (1,360)

Hoop snake and "blowing viper"

THE TRUTH ABOUT THESE FAMOUS STORIES?

Hoop snakes hold onto their own tails and roll like hoops. FALSE.

Milk snakes suck milk from cows. FALSE.

Bats try to get in your hair. FALSE.

The hummingbird flies backwards as well as forwards. TRUE.

The hog nosed snakes known as "blowing vipers" blow venom from their mouths. FALSE.

The age of a rattlesnake is the same as the number of its rattles. FALSE.

One oyster lays several million eggs in a few days. TRUE.

The giant panda is a bear. FALSE.

Giant panda

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